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Keller et al.

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(54) **HIGH TEMPERATURE ELASTOMERS
FROM LINEAR POLY(SILARYLENE-
SILOXANE-ACETYLENE)**

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528/32; 528/38; 528/35; 585/416; 556/410;
556/431**

(58) **Field of Search** **528/43, 34, 32,
528/35; 525/477; 585/416; 556/410, 431**

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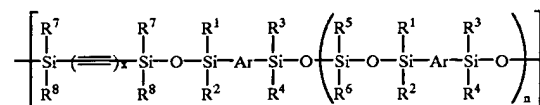
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(57) **ABSTRACT**

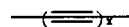
A linear polymer has repeating units represented by the formula



wherein

(a) n is an integer greater than or equal to 0,

(b) x is an integer greater than or equal to 1, and



represents an unconjugated acetylenic group when x is equal to 1 or conjugated acetylenic groups when x is greater than 1;

(c) Ar is an aromatic group, and

(c) R¹, R², R³, R⁴, R⁵, R⁶, R⁷ and R⁸ are independently selected from the group consisting of alkyl, aryl, alkylaryl, haloalkyl, haloaryl and mixtures thereof. The linear polymer may be thermally cured to form a crosslinked polymer.

17 Claims, No Drawings